

REMARKS/ARGUMENTS

Applicants respectfully request favorable reconsideration of this application, as amended.

In the outstanding Office Action, each of independent Claims 1 and 3 as well as their respective dependents, were newly rejected under 35 U.S.C. § 102(b) as being anticipated by Fujiu et al. (Fujiu).

Without acceding to the rejection, each of Claims 1 and 3 has been amended more particularly to set forth certain distinguishing characteristics of Applicants' invention. Specifically, the claims have been amended to recite that the low frictional member is arranged with a radial clearance to an outer peripheral surface of the inner shaft (in the case of Claim 3, the outer peripheral surface of the reduced diameter portion of the inner shaft).

Fujiu discloses injection of a synthetic resin member 5 into the inner periphery at the end of an outer shaft to constitute a fixing support by means of frictional resistance (see column 3, lines 51-55). As such, and in contrast to the claimed invention, the member 5 is provided without clearance to the outer periphery of the inner shaft. Additionally, in order to conduct such an injection

of resin, normally halved jigs are used to hold the work (the outer hollow shaft in this case) and upper and lower jigs are pressed to withstand the pressure at the time of resin material injection in order to assure sufficient spreading of resin material onto the entire peripheral surface of the outer shaft end. If there is any clearance between the jigs and the work, it is not possible to properly fill the resin material in the required annular space. In addition, very high pressure is applied when conducting the injection. After the injection is finished and the jigs are removed, a reaction force from the inner shaft is inevitably generated, and the end of the outer shaft is apt to expand outwardly as shown, for example, in the sketch below.



If the diameter of the end of the outer shaft becomes large, additional machining is required to reduce the diameter in order to accommodate the assembly of additional parts on the outer shaft.

In contrast to Fujiu, the present invention as set forth in Claims 1 and 3 includes, as stated above, a low frictional member arranged with a radial clearance to an outer peripheral surface of the inner shaft. Accordingly, Claims 1 and 3 are significantly distinguished from Fujiu. Preferably, as recited in newly presented Claims 19 and 20, the low frictional member is a pre-formed member which is inserted into the front side end of the fitting portion of the outer shaft. This feature is also not taught or suggested by Fujiu. Note additionally the amendments to Claims 6, 8, 13, and 15, which now recite that the end portion of the outer shaft has an axial end opening and a recess formed in an inner peripheral surface adjacent to the end opening and in which the low frictional member is axially fixed.

In view of the amendments presented herein, and for the reasons indicated in the preceding remarks, Applicants respectfully submit that this application is now in condition for allowance.

An Information Disclosure Statement accompanies this Amendment in order to make of record a reference recently cited in a counterpart foreign application. Confirmation that the reference has been considered is respectfully requested with the next official communication.


The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been requested separately, such extension is hereby requested.

Respectfully submitted,

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